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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,877	12/23/1999	ADRIAN SFARTI	0100.9910145	8063

7590

04/29/2005

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EXAMINER

PAN, DANIEL H

ART UNIT	PAPER NUMBER
2183	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/471,877

Applicant(s)

SFARTI ET AL

Examiner

Daniel Pan

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 7-13 and 20-27 is/are allowed.  
6) ☒ Claim(s) 1-6, 14, 18, 19 and 28-33 is/are rejected.  
7) ☒ Claim(s) 15-17 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 23 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

1. Claims 1-33 remain for examination.
2. Claims 1-4, 14,18,19, 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wandler et al. (5,991,833) in view of Sakugawa (6,684,278) .
3. Claims 5,6, 32,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wandler et al. (5,991,833) in view of Sakugawa et al. (6,684,278) as applied to claim 1 and claim 28 above, and further in view of Onishi et al. (5,845,329).
4. Wandler et al. (5,991,833) and Onishi et al. (5,845,329) were cited to applicant in a previous office action, therefore, copies of these patent are not provided herein.
5. The rejections are maintained and incorporated by reference the last Office action on 11/09/04.
6. The response filed on 02/07/05 have been fully considered but is not persuasive.
7. In the remarks, applicant argued that :
  - a) Sakugawa's memory access is actually slowed down as the CPU does not access the memory at the rate of memory;
  - b) Wandler did not teach the integrating both a north bridge and south bridge on the same chip.
8. As to a) above, applicant is reminded that unclaimed features cannot be used to overcome the prior art (e.g. see CCPA In re Lundenberg & Zuschlag, 113, USPQ 530, 534 (1957)). For example, nowhere does applicant claim recite the slower, or slowed

Art Unit: 2183

down, or the like. Applicant only recites the processing by the north bridge the memory access at a rate of memory. It can be seen that the north bridge is processing the memory at the rate of the memory. No distinction of lower or faster rate has been recited into the claim. As long as a north bridge, or the like, is processing at the memory rate it will read on the claim. Sakugawa taught a memory access from a CPU which was allowed to be operated at a rate adjusted to the memory wait time (see col.3, lines 1-14, col.5, lines 5-46, col.7, lines 5-25). Sakugawa was used for supplementing the teaching of the request processed at a rate of memory. The reasons of obviousness were already given in Paragraph 4 of the last Office action, therefore, it will not be repeated herein.

9. As to b) above, Wandler's south bridge was included into the computer system 10 (see fig.2). However, Wandler also taught the computer system 10 could be implemented with PCI bus architecture as shown, or other bus architecture (see col.7, lines 14-16). Therefore, one of ordinary skill in the art should be able to recognize the other bus architecture, such as the chip interconnection, could also be applicable into Wandler in view of the integration of the north bridge into CPU (see col.6, lines 5-7) taught already by Wandler in order to minimize the hardware overheads, and therefore, enhancing the efficiency of the computer system.

10. Claims 7-13, 20-27 would be allowable over the art of record for specifically showing the combined features of the functional elements of the instruction module,

and the programmable phase locked loop and the memory access request received from the central processing unit at operational rate of the central processing unit and the memory access request received from the request buffer at the memory rate, the memory access request when information relating to executing one of the operational instructions was not stored in the data module or the instruction module and the north bridge for the operating rate of the central processing unit and for the operating rate of the memory.

11. Claims 15-17 are objected for being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art of record further teaches the combined elements of the data module, instruction module, phase locked loop, the request issued at the operating rate of the CPU, the memory access request when information relating to executing one of the operational instructions was not stored in the data module or the instruction module and the north bridge at the operating rate of central processing unit.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

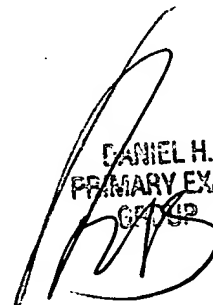
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 703 305 9696, or the new number 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 703 305 9712, or the new number 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***21 Century Strategic Plan***

  
DANIEL H. PAN  
PRIMARY EXAMINER  
09/12